

Appl. No. : 09/973,844
Filed : October 9, 2001

REMARKS

With this amendment, Claims 1-21 and 23-59 remain pending in the present application. Claims 1, 3-5, 11-13, and 15-17 have been amended, Claims 40 - 54 have been cancelled and Claims 55-59 have been added. In view of the foregoing amendment and the following remarks, Applicant respectfully requests reconsideration and allowance of this application.

Claim Rejection-35 U.S.C. § 112

The Examiner rejected Claim 13 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner indicated that the phrase "the fiber cement a surface of the first component" in Claim 13 does not appear to make sense. Applicant agrees with the Examiner and has revised Claim 13 so that its meaning and scope comply with 35 U.S.C. § 112. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

Claim Rejections-35 U.S.C. § 103(a)

The Examiner rejected all pending claims, except for Claim 36, under 35 U.S.C. § 103(a) as unpatentable over various references. Specifically, the Examiner rejected Claims 1-7, 14-22, 25, 26, 28-31, 33, 34, 37 and 39 as obvious over U.S. Patent No. 4,263,752 to Jungbluth in view of U.S. Patent No. 5,989,335 to Soroushian and Claims 1, 8, 9, 25, 27, 32, 33, and 38 as obvious over U.S. Patent No. 6,463,702 to Weaver in view of Soroushian. The Examiner also rejected Claims 1 and 23 as obvious over U.S. Patent No. 4,495,738 to Sheber in view of Soroushian and Claims 1 and 24 as obvious over U.S. Patent No. 6,062,772 over Perkins in view of Soroushian. For the reasons discussed below, Applicant respectfully traverses these rejections.

After carefully reviewing each of the cited references, Applicant submits that none of the references, either individually or in combination, are directed towards a composite material having a *pre-formed* fiber-cement layer that is capable of retaining its shape and yet sufficiently *flexible* for a period of time after assembly that it is capable of being molded, as described in certain embodiments of the pending application. To the best of Applicant's knowledge, fiber cement layers in most conventional composite materials are typically either pre-fabricated and cured prior to assembly or formed from a cementitious slurry that is deposited, in situ, onto the core using a casting process.

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Disadvantageously, the pre-cured fiber cement layers generally do not afford users the ability to emboss the surface of the fiber cement. Moreover, the interfacial bond strength between the pre-cured fiber cement and the core is often not strong enough to withstand significant tension and thus can be prone to failure under stress or compression. While casting the fiber cement layer in situ may form a stronger interfacial bond in some cases, the process can be expensive and inconvenient to implement as it requires the use of equipment dimensioned to accommodate a variety of core materials. Moreover, fiber-cement in the wet, slurry form is generally more difficult to handle and manipulate than a pre-formed panel that can retain its shape.

Thus, one novel aspect of Applicant's embodiments is directed towards forming a composite material having a fiber-cement layer that is pre-formed and yet sufficiently flexible for a limited period of time after assembly so that the layer can be molded with various patterns during this period of time. Another novel aspect of Applicant's embodiments is directed towards a building composite material comprised of a pre-formed fiber cement facing that forms penetrating mechanical and chemical bonding with the core material so as to improve the strength of the bonding between the fiber-cement layer and core. In one embodiment, Applicant provides a composite building material that has the combined advantages of a pre-formed, pre-cured fiber cement layer as well as a fiber cement layer that is formed in situ from a wet casting process. None of the prior art references disclose, teach, or suggest a composite building material with these novel features.

With respect to Jungbluth, Applicant notes that Jungbluth merely discloses applying a thin fiber-reinforced layer to the outer surface of the insulating layer of a fire gate. Jungbluth fails to provide any detailed descriptions with regards to the nature of the fiber-reinforced layer, other than that it is a thin glass mat reinforced cement layer. Thus, Jungbluth at best appears to teach what is already known in the prior art with respect to applying a thin fiber-cement facing to a core material.

Similarly, no where in Weaver does it teach or suggest applying a *pre-formed* fiber-cement layer that is capable of retaining its shape and yet can be molded for a limited period of time after assembly. Weaver simply discloses positioning an insulating panel adjacent to a wall panel, which all appears to be aspects of the prior art. With respect to Sheber, Applicant notes

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Sheber discloses using a mold to form a concrete panel, which is indicative of a typical casting process. As such, it would be counter-intuitive to suggest that the concrete panels described in Sheber are *pre-formed* prior to being placed in the mold. Perkins teaches mechanically attaching a pre-formed, rigid decorative facade to the outer surface of a block retaining wall. There is no reference in Perkins that would teach or suggest that the decorative facade is flexible enough to be molded. In fact, there would not have been a need to mold the Perkins' facing panels after assembly as the panels are already embossed with a pattern. Accordingly, Applicant submits that the pending claims are patentable over the cited references and respectfully requests that the rejections of the claims over these references be withdrawn.

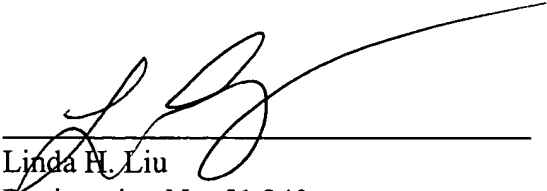
CONCLUSION

In view of the foregoing, Applicant respectfully submits that all pending claims, including the newly added Claims 55-59, of the present application are in condition for allowance, and such action is earnestly solicited. Should there be any impediments to the prompt allowance of this application that could be resolved through a telephone conference, the Examiner is respectfully requested to call the undersigned at the number shown below. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 6/4/2003

By: 
Linda H. Liu
Registration No. 51,240
Attorney of Record
Customer No. 20,995
(909) 781-9231